

**REMARKS**

The present application has been revised to reflect the 371 status.


Attached hereto is a marked-up version of the changes made to the specification by the current amendment. The attached page is captioned "Version with markings to show changes made".

Favorable action on the merits is solicited.

Respectfully submitted,

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DESCRIPTION

JTS  
A1

NOVEL PROTEIN AND UTILIZATION THEREOF

5 Technical Field

10 The present invention relates to a novel protein having a specific amino acid sequence, having PDZ domains and/or WW domains, and being expressed specifically in the brain, a DNA comprising a DNA region encoding said protein, a process for producing the protein, and use of the protein and the DNA.

Background Art

15 Heretofore, a large number of physiologically active substances have been isolated and identified, and their functions are being elucidated. Some of them are known to exhibit various activities in a wide variety of organs or cells. The various activities in a wide variety of organs or cells appear generally via receptors to which the  
20 physiologically active substances bind, but there are many cases where whether the combination of the physiologically active substances binding to the receptors is identical in all organs and cells or specific to each organ or cell is not elucidated.

25 Some physiologically active proteins have PDZ domains

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5 molecules, which comprises comparing the case where the protein according to item 1, the protein according to item 2, the partial peptide according to item 6 or a salt thereof is introduced into cells expressing the protein according to item 17 or a salt thereof, activin receptors or activin intracellular information transmission molecules, with the case where the protein according to item 1, the protein according to item 2, the partial peptide according to item 6 or a salt thereof and a test compound are introduced into cells expressing the protein according to item 17 or a salt thereof, activin receptors or activin intracellular information transmission molecules, by measuring the amount of the protein according to item 1, the protein according to item 2, the partial peptide according to item 6 or a salt thereof bound to the protein according to item 17 or a salt thereof, activin receptors or activin intracellular information transmission molecules in the cells in both the cases,

15 22. A method for screening a compound or a salt thereof inhibiting or promoting a binding of the ~~labeled~~ protein according to item 1, the ~~labeled~~ protein according to item 2, the ~~labeled~~ partial peptide according to item 6 or a ~~labeled~~ salt thereof to the protein according to item 17 or a salt thereof, activin receptors or activin intracellular information transmission molecules, which comprises

20 25

comparing the case where the labeled protein according to  
item 1, the labeled protein according to item 2, the  
labeled partial peptide according to item 6 or a labeled  
salt thereof is contacted with a membrane fraction of cells  
5 expressing the protein according to item 17 or a salt  
thereof, activin receptors or activin intracellular  
information transmission molecules, with the case where the  
labeled protein according to item 1, the labeled protein  
according to item 2, the labeled partial peptide according  
10 to item 6 or a labeled salt thereof and a test compound are  
contacted with a membrane fraction of cells expressing the  
protein according to item 17 or a salt thereof, activin  
receptors or activin intracellular information transmission  
molecules, by measuring the amount of the protein according  
15 to item 1, the protein according to item 2, the partial  
peptide according to item 6 or a salt thereof bound to the  
membrane fraction of the cells in both the cases,

23. A method for screening a compound or a salt thereof  
inhibiting or promoting a binding of the protein according  
20 to item 1, the protein according to item 2, the partial  
peptide according to item 6 or a salt thereof to the  
protein according to item 17 or a salt thereof, activin  
receptors or activin intracellular information transmission  
molecules, which comprises comparing the case where the  
25 protein according to item 1, the protein according to item